WHAT IS CLAIMED IS:

1.      A method of controlling a remote imaging platform for image acquisition of an imaging target, the method comprising:

controlling said platform to aim a camera at said target,

controlling said platform to take at least a first, a second and a third images of said target during the course of a single pass of said platform over said target, whilst keeping said camera locked onto said target for a duration required to take said images.

2.      The method of claim 1, further comprising combining the first, second and third images to form an overall imaging output of said target.

3.      The method of claim 2, wherein said combining comprises pixelwise mapping between said images.

4.      The method of claim 3, comprising forming an overall pixel grid comprising pixels from each of said images, thereby to form an overall output being of higher resolution than each of said images.

5.      The method of claim 2, wherein said overall output comprises a comparison between said images to detect movement between said images.

6.      The method of claim 2, wherein said controlling comprises taking at least four images of said target and said combining comprises forming at least two stereo images of said target.

7.   ·  The method of claim 6, wherein said combining further comprises combining at least two of said stereo images using pixelwise mapping, thereby to incorporate, into said overall output, altitude information from each of said at least two stereo images.

8.    The method of claim 1, comprising angling said camera with respect to a direction of approach to said target prior to taking of any one of said images, thereby to increase resolution by hypersampling of said target.

9.    The method of claim 1, wherein said controlling comprises:

controlling said platform to take said first image prior to passing overhead,

controlling said platform to take said second image whilst substantially at nadir with respect to said target, and

controlling said platform to take said third image subsequently to passing overhead,

the method further comprising:

forming a stereo pair from said first and said third image to obtain topographical data of said target, and

applying said topographical data from said stereo pair to said second image to obtain a nadir image with topographical data.

10.    The method of claim 9, wherein said applying said topographical data from said stereo pair to said second image comprises applying a mapping between pixels of said stereo pair and pixels of said second image.

11.    The method of claim 9, further comprising obtaining at least a first additional image prior to passing overhead, and at least a second additional image after passing overhead, and combining said additional images to form at least one additional stereo pair.

12.    The method of claim 11, further comprising applying topographical data of said additional stereo pair to said second image already having topographical data of said first stereo pair.

13.    The method of claim 9, comprising angling said camera with respect to a direction of approach to said target prior to taking of said second image, thereby to increase resolution of said second image by hypersampling of said target.

14. The method of claim 13, wherein said hypersampling comprises:

receiving oblique angle oversampled scanned data, and

rearranging said oblique angle oversampled scan data into regularly arranged pixels, thereby to form a regular image.

15. The image processing method of claim 14, wherein said oblique angle has a tangent of at least one.

16. The image processing method of claim 14, wherein said oblique angle is an angle having an integer tangent.

17. The image processing method of claim 16, wherein said rearranging comprises geometrically carrying out one-to-one mapping of sample pixels from said oblique overscanning, onto an image pixel grid representative of an actual geometry of a scanned object, thereby to form said regular image.

18. The image processing method of claim 14 wherein said rearranging further comprises interpolating between said oblique angle oversampled data to fill pixel positions of an image pixel grid representative of an actual geometry of a scanned object, said pixel positions being intermediate between sampled pixel positions, thereby to form an improved precision image.

19. The image processing method of claim 14, further comprising deconvoluting said oblique angle oversampled scanned data to compensate for optical distortion incurred in scanning.

20. The image processing method of claim 14 wherein said deconvoluting comprises compensating for distortions introduced by said oblique angle oversampling.

5          21. The image processing method of claim 14, wherein said deconvoluting comprises compensating for distortions introduced by said oblique angle oversampling and by optical distortion within said scanning.

22. The method of claim 9, wherein said platform is mounted on an orbiting satellite.

23. A method of controlling an orbital satellite for imaging, the satellite comprising a camera, the method comprising:

downloading to said satellite control software, said control software being operable with a selected imaging target to control said camera to:

aim at said target,

obtain at least a first, a second and a third images of said target over the duration of a single pass,

form an overall image output comprising data from said images.

24. The method of claim 23, wherein said forming an overall image comprises:

carrying out image processing to form at least a fourth image being a stereo pair combined from two of said images.

25. The method of claim 24, comprising forming at least a fifth image being a second stereo pair and combining said stereo pairs to form said overall output such that said overall output comprises altitude information from a plurality of stereo pairs.

26. The method of claim 23, wherein said forming an overall image comprises:

forming a fourth image, being a stereo pair, from said first and said third images, and

mapping topographical data from said fourth image onto said second image to form a nadir image having topographical data.

27. Apparatus for photograph formation from multiple image capture, at a remote platform approaching and passing over a target, comprising:

camera direction controllability for training said camera on said target,

image taking controllability for controlling said camera to image said target at least once upon approach to said target, at nadir and at least once after passing said target,

image processing functionality for forming a stereo image by combining an image taken upon approach with an image taken after passing said target, thereby to obtain topographical data of said target, and

additional image processing functionality for mapping said topographical data onto an image formed at said nadir, thereby to form a nadir image having topographical data.

28.     Apparatus for photograph formation from multiple image capture, at a remote platform approaching and passing over a target, comprising:

camera direction controllability for training said camera on said target,

image taking controllability for controlling said camera to image said target at least three times over a single pass over said target, at any requested one of approach to said target, at nadir and after passing said target,

image processing functionality for combining said images into a single overall output.

29.     Apparatus for photograph formation from multiple image capture, at a remote platform approaching and passing over a target, comprising:

camera direction controllability for training said camera on said target,

image taking controllability for controlling said camera to image said target at least once upon approach to said target, at nadir and at least once after passing said target,

image processing functionality for forming a stereo image by combining an image taken upon approach with an image taken after passing said target, thereby to obtain topographical data of said target, and

additional image processing functionality for mapping said topographical data onto an image formed at said nadir, thereby to form a nadir image having topographical data.